

EDWARDUS BERNARDUS *de Mensuris*
& Ponderibus *κατ' ἀκίστομον.* Oxonii è Theatro
 Seldonio A. D. 1685.

THIS Compendious Treatise, inscrib'd to Dr. *Po-*
cock the Venerable Sanctuary of Orientall Learn-
 ing, and also annexed to his excellent Comment on the
 difficult Prophet *Hosea*, recommends to the diligence
 of Posterity the Berries and Kernels of fruits, the uni-
 form Cells of Bees, and cheifly the Pendulum of the
 right famous *Galileo*, to conserue the true models of Com-
 mutative Justice. But for the ages past refers especially
 to the ancient Coyns still kept in great plenty in the Cabi-
 nets of Christian Princes: besides the rules of the *Theaters*,
Amphitheaters, *Temples* and *Aqueducts*, &c, of *Europe*
 and *Asia* and *Africa*, which have happily born the strokes
 of time and *Barbary*, and have of late been exactly
 measured by noble and skillfull Travellers: as the Pan-
 theon at *Rome*, *Minervas* Temple in her own City, the
 numerous Antiquitys of *Constantinople*, the admir-
 able Ruine of *Chilmenar*, and the perpetuall Pyramids of
Egypt. From these and severall other Monuments is
 asserted the equality of the *English* foot to that of
 the *Hebreos*, *Babylonians*, *Greeks*, *Chineſes*, *Castilians*,
 and those of *Lisbon* and of *Lyons*. And farther that al-
 lowing an intire *English* foot 1000 parts, the *Parisian*
 will reach 1066, the *Catholic* foot of *Sr Jonas Moor*
 1089; the old *Roman* 970; that of *Villapandus* deriv'd
 from *Vespasians Congius*, 986; the *Rhinland* foot of
Snellius 1033; the *Venetian* 1140; the *Bononian* of *M^r Auzout*
 1140; to omit the rest. Thus from the foot
 & most proper rise, passing through the various measures
 of Antiquity, this Treatise at last gives for one Degree,
 or the $\frac{1}{360}$ part of the Circuit of the whole Earth, $73\frac{1}{10}$ *En-*
glish

glisb miles, of 5000 foot in a mile: $67\frac{4}{10}$ Catholic miles, $66\frac{2}{3}$ Arabic miles, just according to the old observations of *Hasan, Nodham, Masudy* and other *Arabs*; and little differing from the late Experiments of the diligent and ingenious Mr *Norwood* in *England*, and Mr *Picart* in *France*. As for ancient Weights; the true Hebrew *Sechal*, or *Siclus Argenteus* inscrib'd with *Samaritane Characters*, is equal to three shillings *English*, or to the Tetradrachm of *Thasus* and the *Greek Islands*. The Attick Tetradrachm makes two Shillings & nine pence *English*, or four *Denarii Gordianici*. The *Denarius Consularis Romanorum* bears $7d\frac{1}{2}$. *English*. The *Denarius Tiberianus* $7\frac{1}{4}d$. And lastly the *Denarius Vespasianicus* $6\frac{1}{2}d$ c. Hence also is found the value of an Hebrew Talent in Silver to be 4500. Sterling, and that of Gold to rise to 5400. Sterling. But for the measures of Capacity from the *Cheme* to the *Achane*, I refer you to the Book it self: only advertising, that the Hebrew *Epha* or *Batus* is so farr from agreeing with the *Vaba* of the *Arabs*, (that is the weight of 32 or 34 Rotuls or pounds,) that it contains of water no less then 76 pounds Troy; which is just the Cube of the *English* foot in that Liquid. And also that the Hebrew Cubit, (for this and the *Epha* are the *Jachin* and *Boaz* of a late *Essay to recover the Jewish Weights and Measures*,) falls short at least three inches of the Cubit of Grand *Cairo*, taken by Dr. *John Greaves* the renowned Researcher of Antiquity. In fine the *English* Halfe foot in Brafs compared with the most famous of other Countryes, by an Ordinary Care of the Rowling Press may be truly wrought off and reprented. See Fig. 11th

Ant. Nuck de *Ductu Salivali novo, Saliva, Ductibus Aquosis, & Humore Aqueo. Lugd. Bat. 86.*

THIS Ingenious *Anatomist* divides this little tract into two parts; in the first whereof he gives us his discovery of a new Gland, with its proper *Ductus*; his observations on the *Saliva*; with an historical account of the *Ductus Salivalis* when disordered. This Gland is seated in the Orbit of the *Ey*, just between the *Musculus Abducens*, and the uppermost part of the *Os Jugale*; it is of no certain figure, being sometimes oblong, sometimes almost round, or oval, and sometimes triangular; it exceeds not the bigness of a small Nut, or the weight of half a *drachm*, or two *Scuples* at most; it hath four sorts of Vessels beside that peculiar to it; an Arterie from the *Carotid*; a Vein from the *Jugular*, and its Nerve springs from the third pair called *Motorii oculorum*; and he does not question, but it has Lymphatics also; There are many small sprigs rise from this Gland and meeting together joyn all in one *Ductus*; which crossing the *Ductus Stenonianus* passeth directly downward on the outside of the *Os Maxillare*, and opens upon the last tooth but one of the *Dentes Molares* of the uppermost Jaw. Our *Author* gives it the name of *Ductus Salivalis Superior alter*, in opposition to that of *Steno*. He ascribes no use to its *Saliva* but what is common to the other, *viz.* to moisten the parts; to quicken the tast, and by its more intimate mixture with meats, &c. to promote fermentation, as also upon extraordinary occasions to facilitate Salivation.

In the second part of his Book, he gives us an account of certain *Ductus*'s, that carry water to the *Eys*; having the first time accidentally happened upon one in the *Galeus*; he traced it along on the outside of the *tunica Sclerotis*

Sclerotis, till it entred that part of it called the *Cornea* : it easily admitted a Probe ; but nothing issued forth after the Probe was out, because as he supposes (tho' there be no valve to be found in any part yet) the extremity of the *Ductus* serves as a Valve, and discharges its matter after the same manner as the *Ductus Communis*, the *Ureters*, &c. doe into their respective cavitys, without admitting regurgitation. He has found in Dogs and Birds two in each Ey exactly opposite one to the other ; in some Sheeps Eys five, in others six : but he can by no means discover their rise, being able to trace them as far as the optick Nerve, but very little farther ; he assures us Mankind also are not without them ; all which he confirms by Experiments made both on Men and beasts.

The Generall Bill of *Christnings* and *Burialls*, according to the report made to his *Majestie*, by the Company of Parish-Clerks of *London*. 1685.

Christned	Males.	7484.
	Females.	7246.
	In all.	14730.

Buryed	Males.	11891.
	Females.	11331.
	In all.	23222.

Jo. Con.

Jo. Con. Peyeri, *Merycologia, sive de Ruminantibus & Ruminatione Commentarius*, Basileæ. 4°.

THE Learned *Author* observing that *Rumination* has not been handled as it ought, and that many of those creatures which *Ruminate* are very serviceable to Man-kind, (but especially to his Country-men the *Swiffers*,) is pleased to make this matter the Subject of a Treatise consisting of 3 Books; in the first of which, after a Division of Animals into *Ruminantia & non Ruminantia*, he reckons up those of the former kind; some of which he says, may more properly be said to *Chew the Cud*; others *imitate* that Action, and are here cal'd *Ruminantia Spuria*, as the Mole-Cricket, Bee, Beetle, Crab, Lobster, Mullet, and several Birds: but the creatures which *Ruminate* in a more genuin sence, are, among Quadrupeds, the Ox, Deer, Sheep, and Goat kind, the Camel, Hare, and the Squirrel; also some Men; of whom he gives several instances.

In the Second Book, he treats of the Organs subser-
vient to *Rumination*; as of the several Stomacks belong-
ing to some of the *Ruminantia legitima*; and of them
first in general; then in particular of the *Paunch, Reticu-
lus* (Κεριφαλό) the *Feck*, the *Read*; of the single Stomach
in Hares, and Rabbits; all which are described with
great exactness, and after a very satisfactory manner.

As to the Stomacks of the *Ruminantia Spuria*; he af-
firms they all have spiral musculose Fibres, by means of
which they do (as it were) grind and work their meat,
up and down, after a manner somewhat analogous to
Rumination; for the better effecting of which, in some
of them the Stomack is extreamly rough in the inside,
as in the *Mullet*; in others it is very hard and callous, as
in

in Geese, Hens, &c. in the Stomack of others, (as of the Cricket, and Lobster,) there are Teeth.

After this he passes to the *Oesophagus*, as it is in the *Ruminantia genuina*; where rejecting the account which *Petrus Aponensis*, *Aemylianus*, *Aquapendent*, and even *Fallopianus* has given of that part, he describes it (according to *Steno*) to consist cheifly of 2 spiral muscles form'd like screws, crossing one another. Which sort of make he thinks conduces much to the strength necessary for the carrying meat up and down in that part, in so quick a manner as is requisite.

From the *Oesophagus* he goes to the *Mouth*; of which he mentions such particulars, as seem to be instrumental in *Rumination*; for example, the volubility of the Tongue, rowling the meat up and down in the mouth; the viscosity of the Spittle, keeping it together; the admirable contrivance of the Teeth, &c.

He also reckons up those parts, which assist more remotely in *Rumination*, as the muscles of the Breast and *Abdomen*, and the *Diaphragm*.

To this he subjoins Cutts, representing the four Stomacks of such Creatures as are *Ruminantia bisulca*, the single Stomack of the Rabbit, and the *Oesophagus* of an Ox; the muscular fibres of all which are well traced, and their windings exprest in the Figures.

In the 3d. Book he inquires into the Etymology of the word *Rumination*; and defines the thing to be (in Brutes) a *Natural motion of the Stomack, Mouth, and other parts subservient hereunto, relieving one another in this action; by which the meat, which was eaten rudely and (as it were) in hast, is convey'd back to the mouth again, chew'd there, and then swallow'd a second time, to the great advantage of the Animal*: that this motion is *natural*, he proves from a *History in Galen*, who having preserved a Kid taken out of the *Uterus* of the Dam upon dissection, and bred it by its self, observed that when it

came to eat hard meats, it *Ruminated* like other Goats.

The cheif motive to *Rumination* seems to be the hardness and grossness of the meat, as swallowed at first; the Stomack being not able to master it, unless it be more thoroughly masticated: hence Cattel *chew* the *Cud* more frequently in Winter when they feed on hay, stubble, &c. then in Summer when on grass; and Calves, &c. do not *Ruminate* at all, as long as they live on milk.

Rumination in Men proceeds, as he thinks, either from the imagination of the Mother being intent on this action, or from some ill habit of vomiting, and swallowing the meat again; the cure of it in men, (where it is preternatural) consists in a small quantity of meat easily digested, chewing it well, and walking gently after eating: liquid meats are preferd before solids, especially at the beginning, to break the habit.

He treats of the Food of *Ruminating* Creatures, and their manner of Feeding; of the advantage they are to Mankind, and this action is to them, and consequently to us, as being that which conduces much to the strength and health of both them and us.

As to the Impediments of *Rumination*, they are generally three; some disease or else an excess, or ill quality of the food; if excess be the cause, the *Author* saies it will give present releif, to thrust in your arm as far as you can, and pull out some of the food, and afterwards to drive the beast up and down, not suffering him to drink.

At last (by way of *Appendix*) the *Author* adds Letters from *Webferus*, *Wagnerus*, *Harderus*, and *Muraltus*, concerning the aforesaid subject.

*Castorologia à Jo: Mario, aucta à Jo. Franco. Aug.
Vindel. 85. 8°.*

THIS Treatise of the nature of the *Castor*, being composed many years ago by *Joannes Marius*, Physician at *Ulm*, is not only published, but inlarged by *Joannes Francus*, who out of several Manuscripts, and his own observations, has put the last hand to this Book. It begins with a contemplation of the great usefullness to mankind of things common and contemptible, which serves for an introduction to the Natural History of an Animal of more real use, than value. It is handled according to the Method prescribed by the German *Naturæ Curiosi* in single subjects, where after the different appellations in several Languages and pretended Etymologies of them, he describes the *Beaver* (for it is not our *English Badger*, for which the Author mistakes it) to be an Animal about the bigness of a Cat, amphibious and living upon fruits and barks of trees: his forefeet are like a Dogs, and his hinder like those of a Goose; his tail seems to be an intire Fish, which he always keeps wet, suffering several inconveniences when it is dry. Between its hinder legs grow two bags, which contain the *Castoreum*; these many Authors took for the Testicles of the Animal, till *Rondeletius* first undeceived the world, & proved them by Anatomy to be only bags for this very substance; the reasons of this you have here given you. And after an account of the manner of its feeding, building its nest, bringing forth its young, its age, and places where most frequently found, you have the medical use of several of its parts, as of its Skin which is commended in the Colick, Hysterical pains, Madness, and other distempers, especially in all those commonly accounted Cold; as is likewise the Fat. The blood is sovereign in

the Epilepsy, inward bruises, hardness of the breasts & the like. The Fur, (besides the mechanicall use of it in hats) is astringent, and stops blood. The teeth are used as Amulets for Children in breeding the Teeth, in the Pleurisy, and to prevent the falling-sicknes in Infants. But the chief thing of use about it is the *Castoreum*, which being first described by its sensible qualities, which direct how to distinguish the native from that which is adulterated, all the effects of it in Physick are very particularly enumerated; various receipts for most distempers, backt with the experience of the Physicians who successfully used them, are carefully delivered; which to set down here singly would be to transcribe a great part of the book. All which is so learnedly and faithfully done, and that alternately by *Marius* and *Francus*, that it seems a contention between two very good Naturalist's, to give a just account of one of the best Medicines in Nature: at the end of it is a Catalogue of the Manuscripts which are quoted in the book, some of which have been since Printed, and the rest we may expect from the publisher of this usefull tract.

*Printed at the Theater in Oxford for Sam.
Smith, at the Princes Arms in Paul's
Church-yard London; and Hen. Cle-
ments Book-seller in Oxford.*

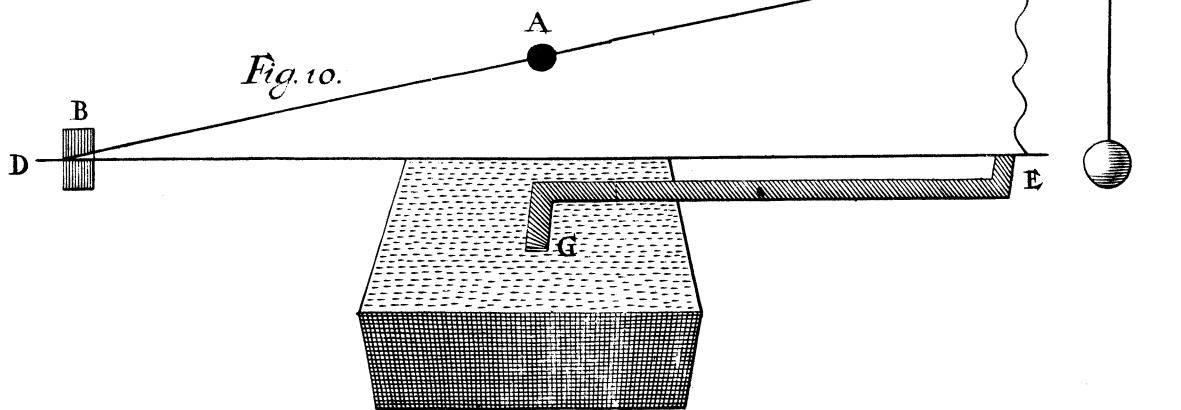
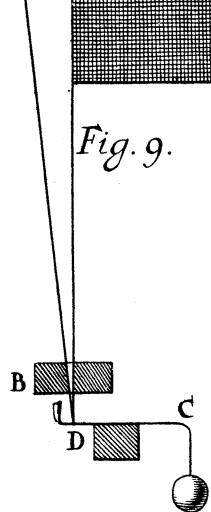
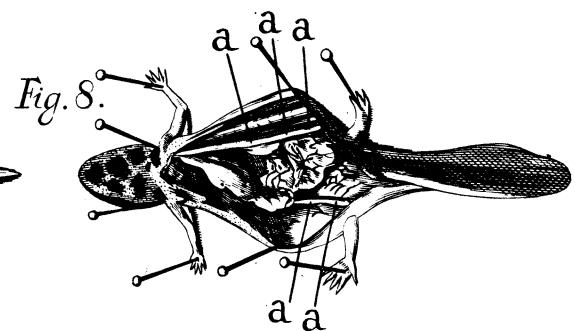
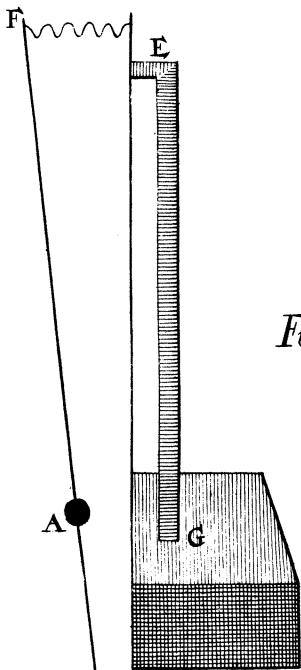
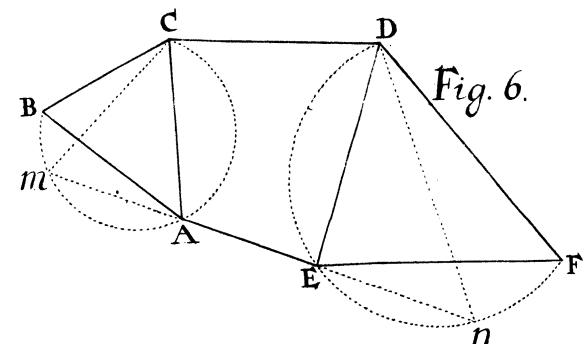
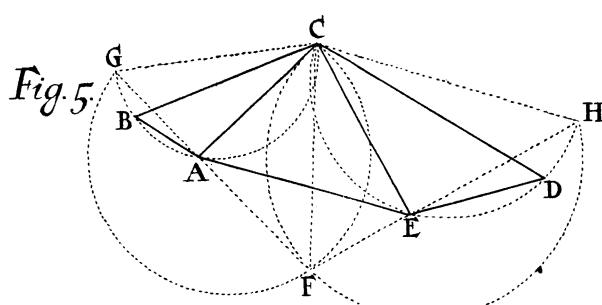
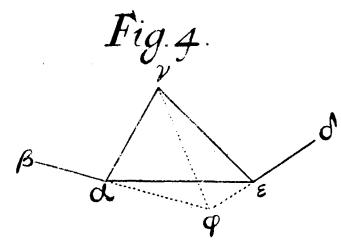
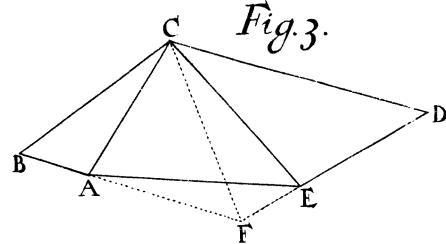
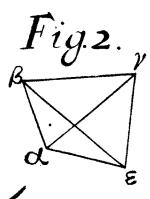
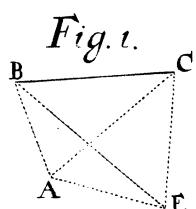


Fig. 11.

Unciae	1	Anglicæ	2	3	4	5	6	7	8
<i>SEMIPEDES</i>									
a. <i>Anglicus & Græcus.</i>		p. <i>Parisinus Auzotii.</i>							
b. <i>Rom. Bernardi.</i>		c. <i>Catholicus Mori.</i>							
g. <i>Rom. Græci.</i>		l. <i>Venetus Auzotii</i>							
v. <i>Rom. Villalpandi.</i>		m. <i>Bononensis Picardi</i>							
r. <i>Rhinlandicus.</i>		n. <i>Bononensis Riccioli</i>							